

ABSTRACT OF THE DISCLOSURE

Disclosed is an AGC (automatic gain control) device and method of an OFDM system with a DC offset compensation function, and a recording medium storing a program including the method. The AGC device calculates an energy of input signals with DC offsets as the summation of the square of the input signals, and calculates an energy of the DC offsets in the input signals as the summation of the square of the DC offsets. Pure signal energy without DC offsets is produced by subtracting the energy of the DC offsets from the energy of the calculated input signal. The energy and an AGC reference value are then compared, and feedback of a comparison result is performed.